

MAIL TO:

STATE OF UTAH
 DIVISION OF PURCHASING
 3150 STATE OFFICE BUILDING, CAPITOL HILL
 P.O. BOX 141061
 SALT LAKE CITY, UTAH 84114-1061
 TELEPHONE (801) 538-3026
<http://www.purchasing.state.ut.us>

Invitation to BidSolicitation Number: **JG3030**Due Date: **09/17/02 @ 2:00 P.M.**

Date Sent: August 27, 2002

Goods and services to be

DESIGN & BUILD A SALT STORAGE BUILDING - GRANTSVILLE LOCATION**Please complete**

Company Name		Federal Tax Identification Number	
Ordering Address	City	State	Zip Code
Remittance Address (if different from ordering address)	City	State	Zip Code
Type <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Proprietorship <input type="checkbox"/> Government	Company Contact Person		
Telephone Number (include area code)	Fax Number (include area code)		
Company's Internet Web Address	Email Address		
Discount Terms (for bid purposes, bid discounts less than 30 days will not be considered)	Days Required for Delivery After Receipt of Order (see attached for any required minimums)		
<p>The following documents are included in this solicitation: Solicitation forms, instructions and general provisions, and specifications. <u>Please review all documents carefully before completing.</u></p> <p>The undersigned certifies that the goods or services offered are produced, mined, grown, manufactured, or performed in Utah. Yes_____ No_____. If no, enter where produced, etc. _____</p>			
Offeror's Authorized Representative's Signature		Date	
Type or Print Name		Position or Title	

**STATE OF UTAH
DIVISION OF PURCHASING**

Invitation to Bid

Solicitation Number: JG3030

Due Date: 09/17/02

Vendor Name:

Item#	Qty	Unit	Description
001	1	EACH	<p>DESIGN & BUILD A NEW SALT STORAGE FACILITY ON THE EXISTING U. D. O. T. PROPERTY AT GRANTSVILLE LOCATION, UTAH, PER THE ATTACHED SPECIFICATIONS.</p> <p>A 5% BID BOND WILL BE REQUIRED AT THE TIME OF BID SUBMITTAL. AND A 100% PERFORMANCE/PAYMENT BOND WILL BE REQUIRED OF THE SUCCESSFUL BIDDER. PLEASE COMPLETE A BOND STATEMENT AND SUBMIT ALONG WITH YOUR BID.</p> <p>YOU MUST BE A LICENSED CONTRACTOR IN THE STATE OF UTAH TO BID THIS PROJECT. PLEASE COMPLETE A CONSTRUCTIONS TRADE LICENSING REQUIREMENTS FORM AND SUBMIT ALONG WITH YOUR BID.</p> <p>THIS IS AN INVITATION TO BID, THEREFORE, YOU MAY EITHER HAND DELIVER OR MAIL IN YOUR BID RESPONSE. BIDS RESPONSES THAT ARE FAXED IN WILL NOT BE CONSIDERED.</p>

FOR MORE INFORMATION AND/OR CLARIFICATIONS PLEASE CONTACT DEBRA BOULTON @ (801) 965-4070.

FOR BID PROCEDURE QUESTIONS PLEASE CALL JARED GARDNER @ (801) 538-3342.

REFERENCE RX# 810 35200000009

Ship To: UDOT GRANTSVILLE LOCATION, UTAH

FREIGHT CHARGES (if applicable)

SHIPPING POINT AND ZIP CODE	
SHIPPING WEIGHT	
MODE OF TRANSPORTATION (Please check one)	
<input type="checkbox"/> Small package/Ground <input type="checkbox"/> LTL(Less than truck load) <input type="checkbox"/> Truckload <input type="checkbox"/> Air <input type="checkbox"/> Other (Please specify)	
NMFC Class # _____	
NMFC Item # _____	
TOTAL PRICE LESS FREIGHT (FOB Origin)	\$
TOTAL PRICE INCLUDING FREIGHT (FOB Destination)	\$

INVITATION TO BID - INSTRUCTION AND GENERAL PROVISIONS

1. **BID PREPARATION:** (a) All prices and notations must be in ink or typewritten. (b) Price each item separately. Unit price shall be shown and a total price shall be entered for each item bid. (c) Unit price will govern, if there is an error in the extension. (d) Delivery time is critical and must be adhered to as bid. (e) Wherever in this document an item is defined by using a trade name of a manufacturer and/or model number, it is intended that the words, "or approved equal" apply. "Or approved equal" means any other brand that is equal in use, quality, economy and performance to the brand listed as determined by the Division of Purchasing & General Services (DIVISION). If the bidder lists a trade name and/or catalog number in the bid, the DIVISION will assume the item meets the specifications unless the bid clearly states it is an alternate, and describes specifically how it differs from the item specified. **MULTIPLE OR ALTERNATE BIDS WILL NOT BE ACCEPTED UNLESS SO STATED IN THE SPECIFICATIONS.** (f) By signing the bid the bidder certifies that all of the information provided is accurate, and that prices bid are correct. (g) This bid may not be withdrawn for a period of 60 days from bid due date.

2. **SUBMITTING THE BID:** (a) The bid must be signed in ink, sealed in a properly-addressed envelope, and either mailed or delivered to the DIVISION OF PURCHASING, 3150 State Office Building, Capitol Hill, Salt Lake City, UT 84114-1061 by the "Due Date and Time." **The "Bid Number" and "Due Date" must appear on the outside of the envelope.** (b) Bids, modifications, or corrections received after the closing time on the "Due Date" will be considered late and handled in accordance with the Utah Procurement Rules, section R33-3-109. (c) **Your bid will be considered only if it is submitted on the forms provided by the state. Facsimile transmission of bids to DIVISION will not be considered.** (d) All prices quoted must be both F.O.B. Origin per paragraph 1.(c) and F.O.B. Destination. Additional charges including but not limited to delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, costs of bonds, or for any other purpose must be included in the bid for consideration and approval by the DIVISION. Upon award of the contract, the shipping terms will be F.O.B. Destination, Freight Prepaid with freight charges to be added to the invoice unless otherwise specified by the DIVISION. (e) All State purchases are subject to the Utah Procurement Code, Title 63, Chapter 56 Utah Code Annotated 1953, as amended, and the Procurement Rules as adopted by the Utah State Procurement Policy Board (Utah Administrative Code Section R33).

3. **FAILURE TO BID:** Failure to respond may result in the removal of your firm from the bidder's list for the commodity(s) listed, unless you advise DIVISION in writing prior to due date that you desire to receive future invitations to bid on this commodity(s). **Three consecutive no responses will automatically result in removal.**

4. **PROPRIETARY INFORMATION:** Suppliers are required to mark any specific information contained in their bid which is not to be disclosed to the public or used for purposes other than the evaluation of the bid. Each request for nondisclosure must be accompanied by a specific justification explaining why the information is to be protected. Pricing and service elements of any bid will not to be considered proprietary. Bids submitted may to be reviewed and evaluated by any persons at the discretion of the state.

5. **BONDS:** The state has the right to require a bid bond, payment bond and/or a faithful performance bond from the bidder in an amount not to exceed the amount of the contract.

6. **SAMPLES:** Samples of item(s) specified in this bid, when required by DIVISION, must be furnished free of charge to DIVISION. Any item not destroyed by tests may, upon request made at the time the sample is furnished, to be returned at the bidder's expense.

7. **WARRANTY:** The contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and mutually agreed upon elsewhere in this contract. The contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah applies to this contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to this contract unless otherwise specified and mutually agreed upon elsewhere in this contract. In general, the contractor warrants that: (1) the product will do what the salesperson said it would do, (2) the product will live up to all specific claims that the manufacturer makes in their advertisements, (3) the product will be suitable for the ordinary purposes for which such product is used, (4) the product will be suitable for any special purposes that the State has relied on the contractor's skill or judgement to consider when it advised the State about the product, (5) the product has been properly designed and manufactured, and (6) the product is free of significant defects or unusual problems about which the State has not been warned. Remedies available to the State include the following: The contractor will repair or replace (at no charge to the State) the product whose nonconformance is discovered and made known to the contractor in writing. If the repaired and/or replaced product proves to be inadequate, or fails of its essential purpose, the contractor will refund the full amount of any payments that have been made. Nothing in this warranty will be construed to limit any rights or remedies the State of Utah may otherwise have under this contract.

8. **DIVISION APPROVAL:** Purchase orders placed, or contracts written, with the state of Utah, as a result of this bid, will not to be legally binding without the written approval of the director of the DIVISION.

9. **AWARD OF CONTRACT:** (a) the contract will to be awarded with reasonable promptness, by written notice, to the lowest responsible bidder that meets the specifications. Consideration will be given to the quality of the product(s) to be supplied, conformity to the specifications, the purpose for which required, delivery time required, discount terms and other criteria set forth in this invitation to bid. (b) The bids are opened publicly in the presence of one or more witnesses. the name of each bidder, and the amount of the bid is recorded. Each bid, and the record, is open to public inspection. (c) The DIVISION may accept any item or group of items, or overall low bid. the DIVISION has the right to cancel this invitation to bid at any time prior to the award of contract. (d) The DIVISION can reject any and all bids. And it can waive any informality, or technicality in any bid received, if the DIVISION believes it would serve the best interest of the State. (e) Before, or after, the award of a contract the DIVISION has the right to inspect the bidder's premises and all business records to determine the holder's ability to meet contract requirements. (f) DIVISION does not guarantee to make any purchase under awarded contract(s). Estimated quantities are for bidding purposes only, and not to be interpreted as a guarantee to purchase any amount. (g) Utah has a reciprocal preference law which will to be applied against bidders bidding products or services produced in states which discriminate against Utah products. For details see Section 63-56 20.5 -20.6, Utah Code Annotated.

10. **ANTI-DISCRIMINATION ACT:** The bidder agrees to abide by the provisions of the Utah Anti-discrimination Act, Title 34 Chapter 35, U.C.A. 1953, as amended, and Title VI and Title VII of the Civil Rights Act of 1964 (42

USC 2000e), which prohibit discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age, and Section 504 of the Rehabilitation Act of 1973 or the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disabilities. Also bidder agrees to abide by Utah's Executive Order, dated

March 17, 1993, which prohibits sexual harassment in the workplace. Vendor must include this provision in every subcontract or purchase order relating to purchases by the State of Utah to insure that the subcontractors and vendors are bound by this provision.

revision date: 2/14/2000

STATE OF UTAH
DEPARTMENT OF TRANSPORTATION
FACILITIES MAINTENANCE

NEW SALT STORAGE BUILDING
GRANTSVILLE JUNCTION, UTAH
UDOT JOB NUMBER 81L32702

PROJECT DESCRIPTION

This project is to design and build a new salt storage facility to be constructed at the UDOT maintenance station at Grantsville, Utah per this description and the attached specification.

The objective of this bid is to build the lowest cost salt storage building that meets the parameters established in the specification. The scope of work includes the design and construction of a complete building per the requirements contained in the attached specification. The Owner will stake the location of the building and set the floor elevation. The contractor will be responsible to verify all existing conditions prior to the bid. The contractor will be responsible for design and construction of the building. The Owner will be responsible for backfilling, floor preparation, asphalt and electrical connection to the building. Except for work designated to be done by the Owner, the contractor will be responsible for work done within the building footprint.

It is recommended that potential bidders visit the site. Visits can be arranged through , Bob Thomas, Station Supervisor, phone number (435)884-3960. Questions during the bid period can be addressed to William E. Juszczak, phone number (801) 964-4522. All questions will be required to be submitted by one week before the bid date.

STATE OF UTAH
DEPARTMENT OF TRANSPORTATION
FACILITIES MANAGEMENT

SPECIFICATION FOR SALT STORAGE BUILDING
GRANTSVILLE, UTAH

14 August 2002

GENERAL SPECIFICATIONS

BID

BIDDER _____

Submit Utah *INVITATION TO BID* with all required information.

Submit copy of proposed building plan with bid. Plan shall include schematic floor plan and elevations with information sufficient to describe size of building and materials to be used. Bids which do not include said plans will be considered non-responsive. Plans which do not meet the criteria set forth in the attached specification will be considered non-responsive.

Bid will be awarded based upon the following criteria. The contract will be awarded to the responsive bidder who provides the lowest per square foot price per the base footprint of the building which meets the specification.

For the work described in the specifications and Contract Documents and as described herein, I/we agree to perform the work indicated for the all inclusive lump sum of:

_____ Dollars(\$_____)
(In case of discrepancy, written amount shall govern)

Building Footprint Square Footage _____ S.F. Cost Per Sq. Ft.\$_____

(In case of discrepancy, written amount shall govern)

TIME OF COMPLETION AND DELAY REMEDY

The project shall be substantially complete within one hundred and twenty (120) calendar days after the date of the Notice to Proceed. Contractor agrees to pay liquidated damages in the amount of \$100 per day for each day after the expiration of the Contract Time until the Contractor achieves Substantial Completion.

PAYMENT

Progress payments may be requested at no less than 30 day intervals. Final payment will be made when the project is complete and approved by the Owner.

For prompt payment, mail invoice to: William E. Juszczak
Facilities Manager
UDOT Maintenance Division
Box 148250
Salt Lake City, Utah 84114-8250

BID BOND

A 5% bid bond or cashier's check must be included with the bid.

PERFORMANCE AND PAYMENT BOND

At the time of the execution of the contract, the contractor shall provide a performance and payment bond for 100% of the total purchase price of the contract guaranteeing performance, product and payment. (A cashier's check for the above amount may be substituted for the performance and payment bonds.)

WORKERS COMPENSATION

The contractor will be required to furnish proof that all employees involved in this project are covered by Workmen's Compensation. The State will not be liable for injuries incurred during this project.

INSURANCE

Before contract award, successful bidder must provide a certificate of insurance certifying that the contractor will provide and maintain a policy of insurance in which the Department of Transportation is named as an additional insured. Coverage shall be in the following amounts:

1. \$250,000 for bodily injury
2. \$500,000 for each accident occurrence
3. \$100,000 for property damage

If the contractor cannot obtain this insurance, the contractor shall provide a policy with a minimum coverage of \$1,000,000 in the aggregate.

The certificate must also state that no cancellation or decrease in coverage shall be made without giving the State at least 30 days prior written notice.

MATERIALS

Material furnished to the State of Utah shall be certified as new and must meet all current State and Federal applicable building codes and safety regulations.

Specifications - Salt Storage

Bids shall include all materials and equipment necessary for complete finished construction.

MATERIAL TESTING

Contractor shall provide all material testing as required by the current adopted edition of the Uniform Building Code (UBC).

SPECIAL INSPECTION

Contractor shall provide special inspection per UBC requirements for concrete, asphalt, high-strength bolting and for any other materials, etc. as required by the current adopted edition of the UBC.

WARRANTY

Contractor shall provide a general written one year warranty for the replacement of all defective materials, including labor and travel, that are used in this project. See specific specification sections for other warranties.

BUILDING CODES

The building shall be designed and constructed according to all applicable State, Local and National Codes.

BUILDING PARAMETERS

BUILDING COST

The cost submitted by the bidder must be less than \$75,000. Any bids which exceed this amount will be considered non-responsive. If the bidder cannot meet the requirements of the specification under this budget, bidder may offer options that can be built to this budget. Unless approved by the Owner prior to bid, only the materials listed in the specification may be used. If the bidder wishes to use materials in lieu of those listed, bidder must obtain approval prior to bid. This approval must be obtained whether the proposal is to keep the cost under budget or not.

DIMENSIONS

The maximum allowable building footprint shall be 42 feet by 68 feet. The building shall be a three sided structure. The front of the building shall be one of the 42 foot sides and shall be at least 90% open in plan dimension.

BUILDING STORAGE CAPACITY

Specifications - Salt Storage

The building shall be capable of holding 1000 tons of road salt. The tonnage shall be calculated using the clear inside dimensions of the building times the height of the wall retaining the salt. Capacity calculation may also include the amount able to be stored using the standard accepted angle of repose of salt. For purposes of storage calculation the following standards shall be used.

\$ Bulk Density - 72 lbs/ cu. ft.

\$ Angle of repose - 32°

Plans shall indicate the calculation used to determine the storage capacity of the proposed building.

DESIGN PARAMETERS

The building shall meet the following criteria.

- \$ The building may be no larger than the stated maximum footprint.
- \$ The building must be able to contain the minimum capacity of salt stated.
- \$ The building may be constructed with any combination of materials contained in this specification. The objective of this design is to provide a three-sided cover of sufficient size to contain the quantity of salt specified.
- \$ Attached to this specification are photographs of previously constructed salt storage buildings. These photographs are for reference only. They are not an indication of the only types of construction that can be considered.
- \$ Self-supporting fabric and metal structures, if used, may be used as a ground mounted or wall mounted structure.
- \$ Retaining walls, if used, may be constructed of cast in place concrete, precast concrete or pressure-treated wood.
- \$ The exterior of the building enclosure must be maintenance free.
- \$ Building enclosures, except for the retaining walls may be constructed of concrete, wood, metal, masonry or self-supporting fabric or metal structures. Materials used to comprise the interior of the structure shall not be subject to degradation from long term salt exposure. Examples of acceptable construction include those shown in the photographs. Other types of acceptable construction include wood framed construction with maintenance-free exterior materials, ground-mounted self-supporting fabric structures with or without retaining walls as required to meet capacity, ground-mounted self-supporting metal structures with or without retaining walls as required to meet capacity.
- \$ Buildings with vertical sides shall have a minimum clear height to the bottom of the roof structure of 20 feet. Buildings using arch style roofs shall be configured such that the minimum dimension to the top of the arch at the center point is 27 feet.

Specifications - Salt Storage

- \$ The existing asphalt surface will be used as the floor of the new building. The contractor will remove only the asphalt necessary to construct the building. Backfilling of trenches and patching of asphalt will be by Owner.
- \$ Provide 3 - 4" i PVC sleeves in the rear wall for drainage. Locate as directed by Owner.

FINAL PLAN SUBMITTAL

Prior to commencement of construction, contractor shall submit 3 sets of plans for review by the Owner. Plans shall bear stamps of licensed professionals as required by the State of Utah.

DETAIL SPECIFICATIONS

LOCATION

The building is to be constructed on UDOT owned property, Station 2422, located at approximately 600 West Main Street (SR-138) in Grantsville, Utah.

DESIGN LOADS

Building design loads shall be as follows:

Roof: UL90 for wind load and 30 lb./ sq. ft. snow load.

Wind: 70 mph, exposure AC@

Seismic: Zone 3

Floor: 800 lb/sq ft.

Allowable Soil Bearing Pressure: Refer to Terracon Report, Project No. 61975008, dated April 2,1997.

SITE WORK

Contractor shall be responsible for all site work related to construction of the building only, excavation, etc. Owner shall be responsible for backfilling of footing trenches, compacted fill for asphalt, asphalt, etc.

CAST-IN-PLACE CONCRETE

Comply with latest editions of ASTM C 94; ACI 301, "Specifications for Structural Concrete for Buildings"; ACI 318, "Building Code Requirements for Structural Concrete"; and CRSI's "Manual of Standard Practice."

Specifications - Salt Storage

Engage a qualified independent testing agency to design concrete mixes.
Forms for Unexposed Finished Concrete: Plywood, lumber or metal.

Deformed Reinforcing Bars: ASTM A 615, Grade 60 (ASTM A 615M, Grade 420).

Portland Cement: ASTM C 150, Type 1.

Aggregates: ASTM C 33, Class 4S.

Air-Entraining Admixture: ASTM C 260.

Chemical Admixtures: ASTM C 494

Liquid Membrane-Forming Curing Compound: ASTM C309, clear, Type I, Class B, waterborne.

MIXES

Proportion normal-weight concrete mixes to provide the following properties:

\$	Compressive Strength: 3000 psi (20.7 Mpa) for footings at 28 days.
\$	Slump Limit: 4 inches (100 mm) at point of placement.
\$	Water-Cement Ratio: 0.50 maximum at point of placement.
\$	Air Content: 2 to 4 percent.

EXECUTION

CONCRETING

Construct formwork and maintain tolerances and surface irregularities within ACI 347 limits of Class A for concrete exposed to view and Class C for other concrete surfaces.

Accurately position, support, and secure reinforcement.

Place concrete in a continuous operation and consolidate using mechanical vibrating equipment.

Specifications - Salt Storage

Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placing, and curing.

Contractor will engage a testing agency to perform tests and to submit test reports.

Protect concrete from damage.

PRECAST INTERLOCKING CONCRETE BLOCKS

GENERAL

SECTION REQUIREMENTS

Submit Product Data

PRODUCTS

Blocks shall be precast, interlocking concrete blocks. Blocks shall be full size, 2'-6"x2'-6"x5'-0" or half size, 2'-6"x2'-6"x2'-6". Blocks shall have interlocking tabs, except for top row. Top row shall be flat top.

Blocks shall fit snugly together and interlock to form a stable structure.

Blocks shall have 2" chamfered corners.

Blocks can be made of left-over, returned or similar concrete.

Blocks shall have one seven strand steel loop in center top for lifting, except for flat top blocks.

Blocks shall have one full face without large blemishes (Standard Grade).

EXECUTION

Place blocks per manufacturer's recommendations.

Top of wall shall be acceptable to fabric covered truss manufacturer.

SPECIAL COATINGS

GENERAL

Any concrete product which will come in contact with salt shall be coated with this material.

Specifications - Salt Storage

SECTION REQUIREMENTS

Submit Product Data.

5 year warranty.

PRODUCTS

Two component, high performance polyamide-epoxy coating system.

Manufacturer=s recommended factory-formulated bond coat materials.

Manufacturer=s recommended factory-formulated primers/sealers.

EXECUTION

PREPARATION

Before applying coatings or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Clean and prepare surfaces to be coated according to the manufacturer=s instructions for each particular substrate condition.

APPLICATION

Apply special coating material according to ASTM C 1127 and manufacturer=s recommendation.

Provide two coats over a primer coat with a total dry film thickness of 15 mils.

SPECIAL CONSTRUCTION - FABRIC ARCH SYSTEM

GENERAL

SECTION REQUIREMENTS

Engineer, design, fabricate and erect a complete single span, truss arch fabric covered steel framed building system to withstand loads from winds, gravity, structural movement including movement thermally induced, and to resist in-service use conditions that the building will experience, including exposure to the weather, without failure. System to include 1 end wall assembly.

Specifications - Salt Storage

Submit Product Data and Shop Drawings.

Warranty fabric for fifteen years. Warranty entire system for five years.

PRODUCTS

Product shall be by Cover-All or approved equal. Bidders shall submit product literature with bid for review.

MATERIALS

Steel tubing cross members and back wall framing members shall comply with ASTM 500, Grade B, ASTM A501 or ASTM A53. Provide triple coat exterior finish with interior corrosion resistance coating.

Steel members fabricated from plate or bar stock shall be 42 ksi minimum yield strength and comply with ASTM A529, ASTM A570, or ASTM A572.

Bolts shall be ASTM A307 or A325.

Fabric cover shall be woven high density polyethylene tape with double stack weave, finish coated both sides.

Cover fastening system shall be compatible with cover fabric and include zero stretch belting, welded fabric pockets and 10,000 lb capacity lashing winches.

EXECUTION

FABRICATION

Fabricate components in such a manner that once assembled, they may be disassembled, repackaged and reassembled with a minimum amount of labor.

Shop-fabricate framing components to indicated size and section with base plates, bearing plates, and other plates required for erection, welded in place. Provide holes for anchoring or connections shop-drilled or punched to template dimensions.

ERECTION

Framing: Erect framing true to line, level, plumb, rigid, and secure. Level base plates to a true even plane with full bearing to supporting structures, set with galvanized anchor bolts.

Specifications - Salt Storage

Provide diagonal rod or angle bracing in roof and sidewalls as indicated. Movement-resisting frames may be used in lieu of sidewall rod bracing, to suit manufacturer's standards

Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical and electrical work. Securely attach to building structural frame.

Arrange and nest any lap joints so prevailing winds blow over, not into, lapped joints. Apply fabric and associated fastening system for neat and weather tight enclosure. Protect factory finishes from damage.

Install louvers and any accessories in accordance with manufacturer's recommendations for positive anchorage to building and weather tight mounting.

SPECIAL CONSTRUCTION - METAL ARCH SYSTEM

GENERAL

SECTION REQUIREMENTS

Engineer, design, fabricate and erect the metal arch building system to withstand loads from winds, gravity, structural movement including movement thermally induced, and to resist in-service use conditions that the building will experience.

Submit Product Data and Shop Drawings.

Warranty finish for twenty years. Warranty entire system for five years.

PRODUCTS

Metal arch system to be pre-engineered 22 ga. minimum galvalume sheets. Roof to be designed per stated design criteria. Roofing sheets to be segmented arch with fasteners to form a clear span arch. End panels to match roof panels. The materials furnished shall include the panels, bracing, fasteners, sealants, flashing and all other parts for a complete system. Coordinate end panels with overhead coiling door manufacturer.

Steel coil stock shall be zinc coated by the hot-dip process, Structural Quality, ASTM A446-90 for roll forming, Grade D (50 ksi minimum yield strength).

EXECUTION

ERECTION

Specifications - Salt Storage

The erection of the metal arch system and the installation of the accessories shall be performed in accordance with the building manufacturer's erection drawings and instruction by a qualified erector using proper tools and equipment.

Erect panels true to line, plumb, rigid and secure to the foundation system.

Flash and seal panels at rake with rubber, neoprene or other closures to exclude weather.

Provide shapes of proper design and size to reinforce openings and to carry design loads and vibrations imposed including equipment furnished under mechanical and electrical.

Install ventilators, louvers and other sheet metal accessories in accordance with manufacturer's recommendations for positive anchorage to building and weathertight mounting.

Provide 22 gage flashing to match panels to conceal the panel edges around openings.

METAL BUILDING SYSTEMS

GENERAL

SECTION REQUIREMENTS

Submit Shop Drawings and Product Data.

Two sets of documentation are required including:

- assembly plans and drawings
- structural calculations
- foundation plan with anchor bolt layout
- replacement parts lists
- warranties

PRODUCTS

GENERAL

Provide a complete, integrated set of metal building system manufacturer's standard mutually dependent components and assemblies that form a metal building system capable of withstanding structural and other loads, thermally induced movement, and exposure to weather without failure or infiltration of water into building interior. Includes primary and secondary framing, roof and wall panels, and accessories complying with requirements indicated.

Specifications - Salt Storage

BUILDING MANUFACTURERS

Available manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include the following:

1. American Building Company
2. Braemar Building Systems
3. Butler Manufacturing Company
4. Ceko Building Systems
5. Metallic Building Co.
6. Ruffin Building Systems
7. Star Building Systems
8. Varco-Pruden Buildings
9. Other manufacturers meeting the requirements will be accepted with prior approval from the Owner. Approval must be given one week prior to bid date.

Primary Frame Type: Rigid Clear Span, solid member structural framing without interior columns. Minimum plate thickness shall be 3/8" or structural steel shapes. Frame configuration shall be one-directional sloped. Exterior columns and rafters shall be tapered type.

End Wall Framing: Manufacturer's standard for buildings not required to be expandable. Primary frame to be capable of supporting one-half of a bay design load. To have flush framed girts. End wall and corner columns shall be I-shaped sections fabricated from structural steel shapes, shop-welded, built-up steel plates of C-shaped cold formed structural steel sheet. Minimum thickness shall be 3/8". End wall rafters shall be C-shaped cold formed structural steel sheet with minimum thickness of 0.0598".

Secondary Framing: Manufacturer's standard secondary framing members, purlins, girts, eave struts, flange brace base members, gable angles, clips, headers, jambs and other miscellaneous structural members. Fabricate from cold-formed, structural steel sheet or roll-formed, metallic-coated steel sheet prepainted with coil coating.

Purlins and Girts: C- or Z-shaped sections, minimum 0.0598" thick, with minimum 2 1/2" wide flanges.

Eave Struts: Unequal-flange, C-shaped sections, minimum 0.0598" thick.

Flange and Sag Bracing: Minimum 1 1/2" x 1 1/2" structural steel angles, minimum 0.0598" thick.

Base or Sill Angles: Minimum 3" x 2" zinc-coated steel sheet, minimum 0.0747" thick.

Purlin and Girt Clips: Zinc-coated steel sheet, minimum 0.0747" thick.

Specifications - Salt Storage

Secondary End Wall Framing: Manufacturer's standard sections fabricated, zinc-coated steel sheet, minimum 0.0747" thick.

Framing for Openings: Channel shapes, minimum 0.0598" thick.

Miscellaneous Members: Manufacturer's standard sections.

Eave height: Manufacturer's standard height, but not less than shown on drawings.

Roof Assembly: Manufacturer's standard standing seam roof panels.

Exterior Wall System: Manufacturer's standard field-assembled insulated wall panels.

Manufacturer's Qualifications: Member of MBMA. AISC Certification for Category MB.

Source Limitations: Obtain each type of metal building system component through one source from a single manufacturer.

Structural Steel: Comply with AISC S355 or AISC S342.

Cold Formed Steel: Comply with AISI SG-671 and AISI SG-911.

Warranties: Written five year warranty, executed by manufacturer agreeing to repair or replace roof or wall panels that fail in materials and/or workmanship.

Written twenty year warranty, signed by the manufacturer agreeing to repair finish or replace roof or wall panels that show evidence of deterioration of factory-applied finishes. Deterioration of finish includes but is not limited to color, fade, chalking, cracking, peeling and loss of film integrity.

STRUCTURAL FRAMING MATERIALS

Structural Steel Shapes: ASTM A 36/A 36M or ASTM A 529/A 529M.

Steel Plate, Bar or Strip: ASTM A 529/A 529 M, ASTM A 570/A 570M or ASTM 572/A 572 M. 50,000 psi minimum yield strength.

Steel Tubing or Pipe: ASTM A 500, Grade B or ASTM A 53, Grade B.

Structural Steel Sheet: Hot-rolled, ASTM A 570/A 570M, Grade 50 or 55; hot-rolled ASTM 568/A 568M or; cold-rolled ASTM A 611 structural quality, matte (dull) finish.

Specifications - Salt Storage

Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653 M, structural quality, Grade 50 with G60 (Z180) coating designation, mill phosphatized.

Metallic-Coated Steel Sheet Prepainted with Coil Coating: Steel sheet metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A. Zinc-Coated (Galvanized) Steel Sheet to comply with ASTM A 653/A 653 M coating designation, structural quality.

High-Strength Bolts, Nuts and Washer: ASTM A 325 325 M, Type 1, heavy hex steel structural bolts, heavy hex carbon-steel nuts and hardened carbos-steel washers. Finish shall be hot-dip zinc coating, ASTM A 153, Class C. Minimum size bolts for primary systems shall be ϕ diameter.

Anchor Rods, Bolts Nuts and Washers: Unheaded bolts, ASTM A 572/A 572 M, Grade 50. Headed bolts, ASTM A 325 325 M, Type 1 heavy hex steel structural bolts and heavy hex carbon-steel nuts. Washers, ASTM A 36/A 36M.

Bracing Rods: ASTM A 36/A, ASTM A 572/A 572M Grade D or ASTM A 529/A 529 M Grade 50. Rods shall be 2" minimum diameter with 12" minimum threaded end. Cable bracing is not allowed.

Primers: Manufacturer's standard, lead- and chromate- free, nonasphaltic, rust-inhibiting primer.

PANEL MATERIALS

Metallic-Coated Steel Sheet Prepainted with Coil Coating: Steel sheet metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A. Zinc-Coated (Galvanized) Steel Sheet to comply with ASTM A 653/A 653 M coating designation, structural quality. Yield strength, 50,000 psi.

Roof Panels: Minimum thickness, 24 gauge. Panels shall be 24" wide with 3 inch high raised major ribs at panel edges and intermediate stiffening ribs symmetrically placed between major ribs for full panel length. Joint type shall be folded, mechanically seamed type. Clip system shall be floating type to accommodate thermal movement. Surface shall be smooth, flat mill finish.

Exterior Finish: Manufacturer's standard two-coat, thermocured system, consisting of specially formulated inhibitive primer and fluoreopolymer color topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight, with a total minimum dry film thickness of 1 mil and 30 percent reflective gloss when tested according to ASTM D 523.

Specifications - Salt Storage

Provide coating field tested under normal range of weather conditions for a minimum of 20 years without significant peel, blister, flake, chip, crack or check in finish; with chalking in excess of a chalk rating of 8 according to ASTM D 4214 and without fading in excess of five Hunter units.

Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored backer finish, consisting of prime coat and wash coat with a total minimum dry film thickness of 0.5 mil.

Roof Panel Accessories: Provide components required for a complete roof panel assembly including trim, copings, fasciae, mullions, sills, corner units, ridge closures, clips, seam covers, battens, flashings, gutters, sealants, gaskets, fillers, closures strips and similar items. Match materials and finishes of panels.

Wall Panels: Provide manufacturer's standard panels fabricated from metallic-coated steel sheets prepainted with coil coating, factory formed to provide 36 inch coverage, with raised major ribs at 12" o.c. and intermediate stiffening ribs symmetrically placed between major ribs for the full panel length. Minimum material thickness, 24 gauge. Minimum panel thickness, 1C@.

Wall Panel Accessories: Provide components required for a complete wall panel assembly, including trim, copings, mullions, sills, corner units, clips, seam covers, battens, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match materials and finishes of panels.

Exterior Finish: Manufacturer's standard two-coat, thermocured system, consisting of specially formulated inhibitive primer and fluoreopolymer color topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight, with a total minimum dry film thickness of 1 mil and 30 percent reflective gloss when tested according to ASTM D 523.

Provide coating field tested under normal range of weather conditions for a minimum of 20 years without significant peel, blister, flake, chip, crack or check in finish; with chalking in excess of a chalk rating of 8 according to ASTM D 4214 and without fading in excess of five Hunter units.

Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored backer finish, consisting of prime coat and wash coat with a total minimum dry film thickness of 0.5 mil.

Fascia and Soffit Panels: Match roof panel profile and material. Fabricate flat-pan panels from metallic coated steel sheets prepainted with coil coating, factory formed to provide 16-inch coverage with 1-inch high, inverted-L, standing seam vertical ribs at panel edges.

Specifications - Salt Storage

Panel Sealants: Pressure-sensitive 100 percent solids, gray polyisobutylene compound sealant tape with release paper backing, permanently elastic, nonsag, nontoxic, nonstaining, 2" wide and 1/8" thick. Joint sealant, ASTM C 920, one-part elastomeric polyurethane, polysulfide or silicone-rubber sealant of type, grade, class and use classifications required to seal joints in panels and remain weathertight and as recommended by metal building system manufacturer.

Accessories: Provide accessories as standard with metal building system manufacturer. Accessories shall be of the same material and in same finish as roof and wall panels.

Fasteners: Roofing to be installed with clips per manufacturers standard. No fasteners to penetrate roof panels. Other fasteners shall be self-drilling or self-tapping 410 stainless or zinc-alloy steel hex washer head, with EPDM or PVC washer under head if fastener bearing on weather side of panel. Fasteners for flashings and trim shall be blind fasteners of high-strength aluminum or stainless-steel rivets or, self-drilling screws with hex washer head.

Flashing and Trim: Minimum 0.0179 thick material. Provide as required to seal against weather and to provide finished appearance.

Closures: Provide 1 inch thick minimum, closed-cell, laminated polyethylene flexible closure strips to match roof and wall panel profile.

Pipe Flashing: Provide premolded EPDM pipe collar with flexible aluminum ring bonded to base.

MISCELLANEOUS MATERIALS

Cold-applied asphalt mastic, SSPC-Paint 12, 15 ml dry film thickness.

Premixed, nonmetallic, noncorrosive, nonstaining, grout, ASTM C 1107.

Zinc dust, zinc oxide primer, FS TT-P-641 for galvanized metal surfaces.

Finish Painting: Entire exposed interior structure to be finish painted. Finish shall be two coats over primer with total dry film thickness 2.5 mils minimum. Finish shall be full gloss enamel. Ferrous metal shall be primed with synthetic, quick-drying rust inhibiting primer. Zinc-coated metal shall be primed with galvanized metal primer. Finish coats shall be exterior, gloss alkyd enamel.

Structural members to be to manufacturer's standard design. To be finished with one prime coat and one finish coat minimum.

EXECUTION

Specifications - Salt Storage

GENERAL

Erect metal building system according to manufacturer's written instructions and erection drawings.

ROOF PANEL INSTALLATION

Provide roof panels of full length from eave to ridge. Install panels perpendicular to purlins.

Field cutting by torch is not permitted.

Rigidly fasten eave end and allow ridge end free movement.

Fasten roof panels to purlins with concealed clips at each standing seam joint. Install clips at manufacturer's recommended spacing.

Provide weatherseal under ridge cap.

Flash and seal roof panels.

WALL PANEL INSTALLATION

Provide wall panels of full length from base to eave. Install panels perpendicular to girts.

Begin panel installation from corner.

Field cutting by torch is not permitted.

Align bottom of wall panels and fasten with blind rivets, bolts or self-tapping screws.

Provide weather-resistant escutcheons for wall penetrations.

Flash and seal wall panels.

Apply elastomeric sealant continuously between metal base channel and concrete and elsewhere as required.

FASCIA and SOFFIT INSTALLATION

Provide full width panels. Install panels perpendicular to supports.

Field cutting by torch is not permitted.

Specifications - Salt Storage

Fasten panels with self-tapping screws.

Align bottom of fascia panels and fasten with blind rivets, bolts or self-tapping screws. Flash and seal panels with weather closures where fasciae meet soffits, along lower panel edges and at perimeter if all openings.

CLEANING

Immediately after erection, clean, prepare and prime or reprime welds, bolted connections and abraded surfaces of prime-painted primary and secondary framing, accessories and bearing plates.

Repair damaged galvanized coatings or exposed surfaces with galvanized repair paint.

Replace panels that have been damaged or have deteriorated beyond successful repair.

SELF-SUPPORTING METAL BUILDING

Self-supporting metal building to be pre-engineered 22 ga. minimum galvalume sheets. Building to be designed per stated design criteria. Roofing/wall sheets to be segmented with fasteners to form a clear span. End panels to match roof panels. Provide frame as required for openings (doors, vents, etc.). The materials furnished shall include the panels, bracing, fasteners, sealants, flashing and all other parts for a complete system.

ELECTRICAL

GENERAL

SECTION REQUIREMENTS

PRODUCTS

Specifications - Salt Storage

Provide and install the following; one 100 amp weatherproof panel mounted on the interior of the building with 6, 20 amp breakers; 3 Lithonia fixtures, catalog # TX400S A26-120-SF-CRT-LCPP-PPH or equal, equally spaced mounted inside at top.

EXECUTION

Installation shall be per latest edition of the NEC.

Installation shall be complete from the panel, including riser to panel. Installation shall include all conduit, boxes, fixtures, switches, etc for a complete installation.

Specifications - Salt Storage



Orem, Utah

Draper, Utah



Tooele, Utah



Specifications - Salt Storage

Lynndyl, Utah

Kamas, Utah



Site Plan

Specifications - Salt Storage

Specifications - Salt Storage

Site Photographs



CONSTRUCTION TRADES LICENSING REQUIREMENTS

The State of Utah requires any person engaging in a construction trade or acting as, or representing oneself as a contractor in a construction trade for which licensure is required be **licensed before engaging in that trade or contracting activity. It is unlawful for any unlicensed person to submit a bid for any work for which a license is required.** Any person who violates this provision **can not be awarded or accept a contract** for the performance of the work (1993 Utah Code Unannotated 58-55-2(32)(a), 58-55-2(32)(h), 58-55-4(1)(a), 58-55-13(1)).

Definitions

"Construction Trade" means any trade or occupation involving construction, alteration, remodeling, repairing, wrecking or demolition, addition to, or improvement of any building, highway, road, railroad, dam, bridge, structure, excavation or other project, development, or improvement to other than personal property (1993 UCU 58-55-2(5)).

"Contractor" means any person, firm, partnership, corporation, association, or other organization ... [that] undertakes any work in the construction, plumbing, or electrical trade for which licensure is required... (1993 UCU 58-55-2(6)).

Licensed Classifications (See Reverse. List the appropriate contractor license number, classification title, primary or secondary classification number, aggregate dollar limit and license expiration date **OR** attach a copy of the license. If you plan to utilize subcontractors, they must also be licensed and the same information provided or copy(ies) of license(s) attached:

Prime Contractor

<u>License Number</u>	<u>Expiration Date</u>	<u>Class Title</u>	<u>Class Number</u>	<u>Dollar Limit</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Sub-Contractor(s)

<u>License Number</u>	<u>Expiration Date</u>	<u>Class Title</u>	<u>Class Number</u>	<u>Dollar Limit</u>
Name: _____	_____	_____	_____	_____
Name: _____	_____	_____	_____	_____
Name: _____	_____	_____	_____	_____

CONTRACTOR LICENSE CLASSIFICATIONS

Primary Classification Number	Subclassification Number	Title
E100		General Engineering Contractor
B100		General Building Contractor
R100	R101	Residential and Small Commercial Contractor
		Residential and Small Commercial - Nonstructural Remodeling and Repair Contractor
R200		Factory Built Housing Set-up Contractor
S200	S201	General Electrical Contractor
		Residential Electrical Contractor
S210	S211*	General Plumbing Contractor
		Boiler Installation Contractor
		Irrigation Sprinkling Contractor
		Industrial Piping Contractor
S215	S214*	Water Conditioning Equipment Contractor
		Solar Energy Systems Contractor
S216		Residential Sewer Connection & Septic Tank Contractor
S220	S221*	Carpentry Contractor
		Cabinet and Millwork Installation Contractor
S230	S231*	Metal and Vinyl Siding Contractor
		Rainwater Installation Contractor
S240		Glass and Glazing Contractor
S250		Insulation Contractor
S260	S261*	General Concrete Contractor
		Concrete Form Setting and Shoring Contractor
		Gunite and Pressure Grouting Contractor
S270	S271*	General Drywall, Stucco and Plastering Contractor
		Plastering Stucco Contractor
		Ceiling Grid Systems, Ceiling Tile and Light-weight Metal and Non-bearing Wall Partitions Contractor
S280	S281*	General Roofing Contractor
		Single Ply and Specialty Coating Contractor
		Build-up Roofing Contractor
		Shingle and Shake Roofing Contractor
		Tile Roofing Contractor
	S285*	Metal Roofing Contractor
S290	S291*	General Masonry Contractor
		Stone Masonry Contractor
		Terrazzo Contractor
		Marble, Tile and Ceramic Contractor
S300		General Painting Contractor
S310		Excavation and Grading Contractor
S320	S321	Steel Erection Contractor
		Steel Reinforcing Contractor
		Metal Building Erection Contractor
		Structural Stud Erection Contractor
S330		Landscaping Contractor
S340		Sheet Metal Contractor
S350	S351	HVAC Contractor
		Refrigerated Air Conditioning Contractor
		Evaporative Cooling Contractor
		Warm Air Heating Contractor
S360		Refrigeration Contractor
S370		Fire Suppression Systems Contractor
S380		Swimming Pool and Spa Contractor
S390		Sewer and Water Pipeline Contractor
S400*		Asphalt Paving Contractor
S410		Pipeline and Conduit Contractor
S420*	S421*	General Fencing and Guardrail Contractor
		Residential Fencing Contractor
S430*		Metal Firebox and Fuel Burning Stove Installation
S440	S441*	Sign Installation Contractor
		Non-Electrical Outdoor Advertising Sign Contractor
S450		Mechanical Insulation Contractor
S460*		Wrecking and Demolition Contractor
S470*		Petroleum System Contractor
S480*		Piers and Foundations Contractor

*No Trade Examination is required. All applicants must take and pass the Utah Business and Law examination if not previously taken and passed.

**STATE OF UTAH
DIVISION OF PURCHASING**

BOND STATEMENT

BIDDING REQUIREMENTS

A 5% bid bond or cashier's check is required by all vendors bidding on this project. The bid bond must be attached to bid or it will be disqualified. Checks submitted will be returned certified mail after an official award has been made.

AWARD REQUIREMENTS

A 100% performance/payment bond will be required from the award vendor within 14 days after notification of award. Bonds must be in the form of a cashiers checks (no personal or business checks) or a surety bond from a licensed surety company doing business in the State of Utah.

Performance/payment bonds (or checks) will be **held as security for a period of 12 months after completion of project, per state law.** Checks submitted will be returned certified mail only after this specified time. Bidders name must be the same on both the bid forms and all bonds submitted.

Please indicate which method of bonding will be used if awarded this job:

_____ 100% CASHIERS CHECK

_____ 100% PERFORMANCE/PAYMENT BOND

Bond/Ins. Company_____

Agent Name_____

Fax #_____ Phone #_____

Upon awarding, the requesting agency will fax a verification to the bonding company listed above to start the bonding process. It is then the responsibility of the vendor or follow through with their bonding agent to assure the bond is processed. After the bonding company sends the bond to vendor for signatures, it is the responsibility of the vendor to mail or hand carry the original bond (no copies or faxes accepted) to the requesting agency, to the attention of the contract person listed on the bid. **No work can commence until the requesting agency has receipt of this performance/payment bond.** After this time the contract will be officially released to the award vendor.